

International Workshop on Radiation Imaging



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Simulation and Measurement of Absorbed Dose from ^{137}Cs gammas using a Si Timepix Detector

Content :

The TimePix readout chip is a hybrid pixel detector with over 65k independent pixel elements. Each pixel contains its own circuitry for charge collection, counting logic, and readout. When coupled with a Silicon detector layer, the Timepix chip is capable of measuring the charge, and thus energy, deposited in the Silicon. Measurements using a NIST traceable ^{137}Cs gamma source have been made at Johnson Space Center using such a Si Timepix detector, and this data is compared to simulations of energy deposition in the Si layer carried out using FLUKA.

Primary authors : Mr. STOFFLE, Nicholas (University of Houston)

Co-authors : Prof. PINSKY, Lawrence (University of Houston) ; Dr. EMPL, Anton (University of Arkansas)
; Mr. SEMONES, Edward (NASA Johnson Space Center)

Presenter : Mr. STOFFLE, Nicholas (University of Houston)

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